

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.21**WELDING WITNESS REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000503**Date Inspected:** 17-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1630**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Shanghai, China

**Witness:**      **Procedure Qualification Record**  
**Welding**                      **NDT**

**Welder Qualification**  
**Mechanical Testing, describe:**

**Fracture Critical****Index Lot #:** B78-001-08**Witness Lot #:** B78-001-08**Bridge No:** 34-0006**Component:** Bid 52**Welder:** Zhu Haipi**ID #:** N/A**Joint Description:** Skewed "T" Joint

N/A

**WPS ID #:** PWPS-B-T-2213

N/A

**Base Metal:** ASTM Gr. 345

N/A

**PQR ID #:** HP200801-1

N/A

**Thickness:** 26 mm

N/A

**Process:** SMAW

N/A

**Electrode Spec/Class:** AWS A5.1/ E7018

N/A

**Positions:** 3G

N/A

**Backing Material:**

N/A

**CWI:** Haung Wei

N/A

**Average Amps:** 161

N/A

**AWS Code:** AWS D1.5 2002

N/A

**Average Volts:** 23

N/A

**Applicable Sec:** AWS 5.31

N/A

**Travel Speed:** 70

N/A

**Heat Input:** 3.15

N/A

**Preheat:** 20 degrees Celsius

N/A

**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Gregory Bertlesman was on site at ZPMC Welding Lab to observe the welding of the Procedure Qualification Record (PQR) test plate HP200801-1. PQR HP 200801-1 is a complete joint penetration skewed T joint, welded in the vertical position using the shielded metal arc welding (SMAW) process. Filler metal specification AWS A5.1 and classification E7018-1. The electrode diameter used was 3.2 mm in the root and 4 mm in the fill and cover passes. Test plates were 26 mm thick. Welding was performed per AWS D1.5 2002, Section 5.31 WPS Qualification. Welding was performed by Zhu Haiping. Total passes deposited were 2 from the acute angle side and 11 from the obtuse angle side. The acute side was welded first, then the test plate was backgouged using the air carbon arc process and grinder from the obtuse side. The welding on test coupon appeared to be in compliance with the contract documents. QA Inspector issued lot number B78-001-08 to the test coupon. ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Haung Wei was observed monitoring welding activities at the workstation. American Bridge/Flour representative Craig Knops was present during welding operations.

**Summary of Conversations:**

No reportable conversations on this date.

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## WELDING WITNESS REPORT

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is in general conformance with the contract requirements.

**Observed welding,testing or results:**

is not in conformance with the contract requirements.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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**Inspected By:** Bertlesman,Greg

Quality Assurance Inspector

**Reviewed By:** Cuellar,Robert

QA Reviewer

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